

## Classification of the Family Sepsidae from Korea (Diptera: Acalyptratae)

Sang Jae SUH<sup>1</sup> and Yong Jung KWON<sup>2</sup>

<sup>1</sup>Department of Herb & Food Science, Tongkuk Junior College, Chilgok 718-850, Korea

<sup>2</sup>Department of Agricultural Biology, Kyungpook National University, Taegu 702-701, Korea

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**Abstract** A total of 12 species belonging to 8 genera of Korean sepsid flies are treated herein. Among them, 2 species with 2 genera are newly added to Korean fauna. Keys and distributional data are given for each species.

**Key words** Classification, Diptera, Cyclorhapha, Acalyptratae, Sepsidae, Korea.

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### INTRODUCTION

The sepsids are small and shining blackish flies which characterized generally by having the fore femora with stout bristles or spines on the ventral surface in the males. The larvae are saprophagous and have been found in excrement, dung, manure heap, and other various decaying materials. The adults are common flies, and are often sought in considerable numbers near materials in which the larvae breed.

The first record of this family from Korea was given by Lee and Kwon (1981) who reported *Sepsis monostigma* during their faunistic investigation to Ullungdo. Then, 10 species belonging to 6 genera have been known in Korea prior to the present survey. This time, we intend to add 2 previously unrecorded species to Korean fauna. As the result, a total of 12 species belonging to 8 genera are listed here.

### SYSTEMATICS

Key to the Genera of Korean Sepsidae

- |  |                        |
|--|------------------------|
| 1. First and second basal cells united .....         | <i>Saltella</i>        |
| — First and second basal cells separated .....       | 2                      |
| 2. Mesopleural and outer vertical setae absent ..... | <i>Themira</i>         |
| — Mesopleural and outer vertical setae present ..... | 3                      |
| 3. Humeral seta absent .....                         | <i>Decachaetophora</i> |
| — Humeral seta present .....                         | 4                      |
| 4. Fronto-orbital seta strong .....                  | 5                      |

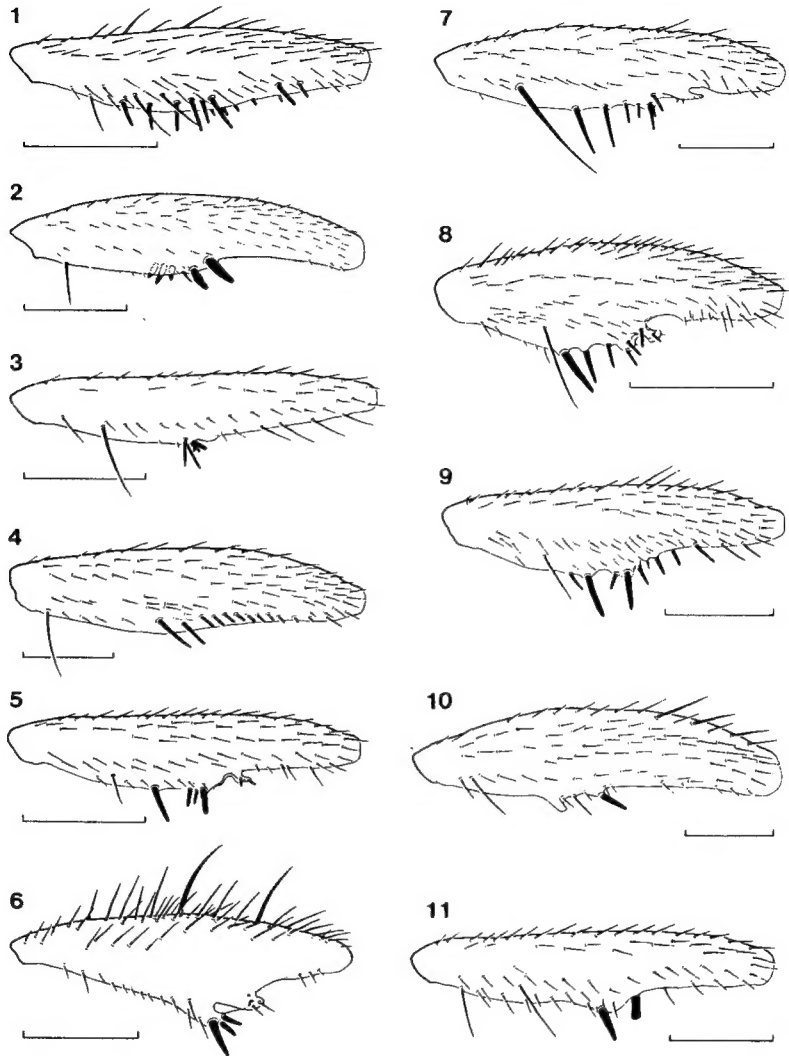


Fig. 1. Fore femur of male, anterior view.

1: *Saltella orientalis*, 2: *Decachaetophora aeneipes*, 3: *Dicranosepsis bicolor*, 4: *Nemopoda pectinulata*, 5: *Sepsis bicornuta*, 6: *S. indica*, 7: *S. monostigma*, 8: *S. punctum*, 9: *S. thoracica*, 10: *Themira nigricornis*, 11: *Xenosepsis fukuharai* (scale: 0.25 mm).

7. Hypopygial process bifurcate at apex ..... *Dicranosepsis*  
 – Hypopygial process not bifurcate at apex ..... *Sepsis*

### Genus 1. *Saltella* Robineau-Desvoidy, 1830 큰꼭지파리속(신칭)

1. *Saltella orientalis* (Hendel, 1934) 큰꼭지파리(신칭) (Figs. 1-2: 1)

*Pandora orientalis* Hendel, 1934, Ark. Zool. 25 A 21: 4.

*Saltella orientalis*: Iwasa et al., 1994, Esakia 24: 204<sup>1</sup>.

Locality. GB: Taegu, GG: Kwangŭng<sup>1</sup>.

Distribution. Korea (Central, South), China (Gansu, Manchuria), Russia (Maritime Territory).

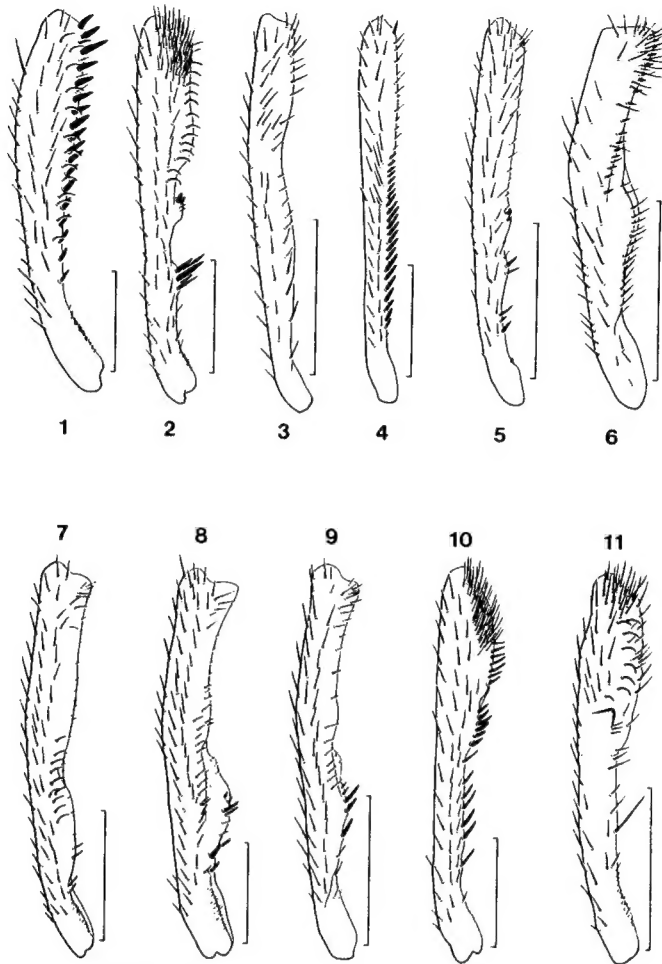


Fig. 2. Fore tibia of male, anterior view.

1: *Saltella orientalis*, 2: *Decachaetophora aeneipes*, 3: *Dicranosepsis bicolor*, 4: *Nemopoda pectinulata*, 5: *Sepsis bicornuta*, 6: *S. indica*, 7: *S. monostigma*, 8: *S. punctum*, 9: *S. thoracica*, 10: *Themira nigricornis*, 11: *Xenosepsis fukuharai* (scale: 0.25 mm).

## Genus 2. *Decachaetophora* Duda, 1926 갈고리꼭지파리속(신칭)

### 2. *Decachaetophora aeneipes* (De Meijere, 1911) 갈고리꼭지파리(신칭) (Figs. 1-2: 2)

*Sepsis aeneipes* De Meijere, 1911, Ann. Mus. Nat. Hung. 11: 119.

*Decachaetophora aeneipes*: Zuska & Pont, 1984, Cat. Pal. Dipt. 9: 155 (Korea).

Locality. GN: Chirisan.

Distribution. Korea (South), Japan (Hokkaido, Honshu, Kyushu, Shikoku), China (Gansu, Sichuan, Taiwan), Russia (Maritime Territory, Kurils), Mongolia, India, Nepal, Sri Lanka, N. America.

## Genus 3. *Dicranosepsis* Duda, 1926 아기꼭지파리속(신칭)

### 3. *Dicranosepsis bicolor* (Wiedemann, 1830) 아기꼭지파리(신칭) (Figs. 1-2: 3)

*Sepsis bicolor* Wiedemann, 1830, Auss. Zweifl. Ins. 2: 468.

*Dicranosepsis bicolor*: Iwasa et al., 1994, Esakia 24: 207-208<sup>1-2</sup>.

Locality. GB: Hwanghaksan, GG: Kwangnŭng<sup>1</sup>, JB: Chŏngnŭngch'i (=Jeonglyeongchi<sup>2</sup>).

Distribution. Korea (Central, South), Japan (whole), China (Jiangsu, Taiwan), India, Indonesia, Malaysia, Nepal, Philippines, Singapore, Thailand, Vietnam.

#### Genus 4. *Nemopoda* Robineau-Desvoidy, 1830 산꼭지파리속(신칭)

##### 4. *Nemopoda pectinulata* Loew, 1873 산꼭지파리(신칭) (Figs. 1-2: 4)

*Nemopoda pectinulata* Loew, 1873, Besch. Eur. Dipt. 3: 305.

Locality. GW: Odaesan (3ex, 19, VIII, 1986, Y. Kwon).

Distribution. Korea (new record: Central), Japan (Hokkaido, Honshu, Shikoku, Kyushu), China (Jiangsu), Russia (European part, Maritime Territory), Finland, Germany, Nepal, Norway, Sweden.

#### Genus 5. *Sepsis* Fallén, 1810 꼭지파리속(신칭)

Key to the species of Korean *Sepsis*

1. Pteropleuron pruinose ..... *indica*  
 – Pteropleuron shining ..... 2
2. Stenopleuron anteroventrally shining ..... *thoracica*  
 – Stenopleuron wholly pruinose ..... 3
3. Propleuron brown ..... *bicornuta*  
 – Propleuron black ..... 4
4. Fore femur with a strong anterobasal seta being much longer than width of the femur .....  
 ..... *monostigma*  
 – Fore femur with a anterobasal seta being as long as width of the femur ..... *monostigma*

##### 5. *Sepsis bicornuta* Ozerov, 1985 극동꼭지파리(신칭) (Figs. 1-2: 5)

*Sepsis bicornuta* Ozerov, 1985, Ent. Ob. 64(4): 841.

*Sepsis bicornuta*: Iwasa et al., 1994, Esakia 24: 205-207<sup>1-3</sup>.

Locality. GB: Hwanghaksan, Sobaeksan, GG: Kwangnŭng<sup>1</sup>, GN: Chirisan (=Tam Ri<sup>2</sup>), GW: Tong-myŏn (=Dong-myŏn<sup>3</sup>).

Distribution. Korea (Central, South), Russia (Maritime Territory).

##### 6. *Sepsis indica* Wiedemann, 1824 노랑꼭지파리(신칭) (Figs. 1-2: 6)

*Sepsis indica* Wiedemann, 1824, An. Ent.: 57.

*Sepsis indica*: Iwasa et al., 1994, Esakia 24: 207<sup>1</sup>.

Locality. GB: Chuwangsan, GN: Chirisan, GW: Pukpang-myŏn (=Pupan-myŏn<sup>1</sup>).

Distribution. Korea (Central, South), Japan (whole), China (Hubei, Sichuan, Taiwan), Russia (Maritime Territory), Myanmar, India, Indonesia, Malaysia, Nepal, Philippines, Sri Lanka, Vietnam.

##### 7. *Sepsis monostigma* Thomson, 1870 꼭지파리 (Figs. 1-2: 7)

*Sepsis monostigma* Thomson, 1870, Eug. Resa: 586.

*Sepsis monostigma*: Lee et Kwon, 1981, Rep. Kor. Ass. Cons. Nat. 19: 163<sup>1</sup>.

*Sepsis monostigma*: Kim, 1984, Cheju Nat. Univ. Journ. 18: 210<sup>2</sup>.

*Sepsis monostigma*: Kim et Chang, 1987, Rep. Kor. Ass. Cons. Nat. 25: 118<sup>3</sup>.

*Sepsis monostigma*: Iwasa *et al.*, 1994, Esakia 24: 205<sup>4-9</sup>.

*Locality*. GB: Chuwangsan, Hayang, Hwanghaksan, Kach'ang, Koryŏng, Kyŏngju, P'algongsan, Taegu, Ullŭngdo (=Is. Ulreung<sup>1</sup>), GG: Kanghwado, Kwangnŭng<sup>4</sup>, GN: Chirisan (=Samjeong Ri<sup>5</sup>, Tam Ri<sup>6</sup>), Kajisan, Kŭmjŏngsan, GW: Obongsan, Odaesan, Sŏraksan, Taeamsan, T'aebaeksan (=Mt. T'aebaek<sup>3</sup>), Tong-myŏn (=Dong-myon<sup>7</sup>), Tongsan-myŏn (=Dongsan-myon<sup>8</sup>), JB: Maisan, Chyŏngnyŏngch'i (=Jeonglyeongchi<sup>9</sup>), JJ: Ilch'ulbong<sup>2</sup>, JN: Tolsando, Wando.

*Distribution*. Korea (Central, South, Chejudo, Ullŭngdo), Japan (whole), China (Guangdong, Taiwan), Russia (Maritime Territory, Kurils), India, Philippines, Sri Lanka.

#### 8. *Sepsis punctum* (Fabricius, 1794) 어리꼭지파리(신칭) (Figs. 1-2: 8)

*Musca punctum* Fabricius, 1794, Ent. Syst.: 351.

*Sepsis punctum*: Iwasa *et al.*, 1994, Esakia 24: 205<sup>1-2</sup>.

*Locality*. GB: P'algongsan, Sobaeksan, GN: Chirisan (=Samjeong Ri<sup>1</sup>), GW: Obongsan, Odaesan, JB: Chŏngnyŏngch'i (=Jeonglyeongchi<sup>2</sup>), JJ: Hallasan.

*Distribution*. Korea (Central, South, Chejudo), Japan (Hokkaido, Honshu, Kyushu), China (Manchuria, Taiwan), Russia (European part, Kurils), Europe, N. America.

#### 9. *Sepsis thoracica* (Robineau-Desvoidy, 1830) 등무늬꼭지파리(신칭) (Figs. 1-2: 9)

*Micropeza thoracica* Robineau-Desvoidy, 1830, Ess. Myod.: 742.

*Sepsis thoracica*: Iwasa *et al.*, 1994, Esakia 24: 207<sup>1-3</sup>.

*Locality*. GB: Kach'ang, JN: Chindo, Chŏpto, JB: Chyŏngnyŏngch'i (=Jeonglyeongchi<sup>2</sup>), Sannae-myŏn (=Nae-lyeong Ri<sup>3</sup>).

*Distribution*. Korea (South), Japan (whole), China (Guangdong, Manchuria, Taiwan), India, Madagascar, Sri Lanka, Syria, Turkey, Europe, N. Africa.

### Genus 6. *Themira* Robineau-Desvoidy, 1830 가시꼭지파리속(신칭)

#### 10. *Themira nigricornis* Meigen, 1826 가시꼭지파리(신칭) (Figs. 1-2: 10)

*Themira nigricornis* Meigen, 1826, Syst. Bensch. 5: 291.

*Locality*. GB: P'algongsan (22ex, 14, VII, 1984, Y. Kwon), GN: Masan (3ex, 23, III, 1986, Y. Kwon).

*Distribution*. Korea (new record: South), Japan (Honshu), Russia (E. Siberia, European part), Finland, France, Germany, Kirghiz, Latvia, Norway, Sweden, UK, Ukraine.

### Genus 7. *Meroplus* Rondani, 1874 애꼭지파리속(신칭)

#### 11. *Meroplus minutus* (Wiedemann, 1830) 애꼭지파리(신칭)

*Sepsis minutus* Wiedemann, 1810, Auss. Zweifl. Ins. 2: 468.

*Meroplus minutus*: Iwasa *et al.*, 1994, Esakia 24: 207<sup>1</sup>.

*Locality*. JB: Chŏngnyŏngch'i (=Jeonglyeongchi<sup>1</sup>).

*Distribution*. Korea (South), Japan (Hokkaido, Honshu, Shikoku, Kyushu), China, Russia (European part, Maritime Territory), Europe, North Africa, Holarctic.

### Genus 8. *Xenosepsis* Malloch, 1925 뿔꼭지파리속(신칭)

#### 12. *Xenosepsis fukuharai* Iwasa, 1984 뿔꼭지파리(신칭) (Figs. 1-2: 11)

*Xenosepsis fukuharai* Iwasa, 1984, *Kontyû* 52: 300-302.

*Xenosepsis fukuharai*: Iwasa *et al.*, 1994, *Esakia* 24: 207<sup>1-2</sup>.

*Locality.* GB: Taegu, GW: Tongsan-myŏn (=Dongsan-myon<sup>1</sup>), JB: Chŏngnyŏngch'i (=Jeonglyeongchi<sup>2</sup>), JN: Chindo.

*Distribution.* Korea (Central, South), Japan (Hokkaido, Honshu, Kyushu), China (Manchuria), Russia (Amur).

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## 韓國産 꼭지파리科의 分類(파리목: 무판류)

서상재<sup>1</sup> · 권용정<sup>2</sup>

<sup>1</sup>동국전문대학 약용식품과

<sup>2</sup>경북대학교 농과대학 농생물학과

한국산 꼭지파리류를 분류 동정한 결과, *Nemopoda pectinulata* Loew, 1873(산꼭지파리)와 *Themira nigricornis* Meigen, 1826(가시꼭지파리) 등 한국미기록 2속 2종을 새로 발견하였으며, 모두 8속 12종이 분포하고 있는 것으로 조사되었다. 또한 각 분류군의 검색표, 채집지 및 분포 등을 정리하였다.

**검색어:** 분류, 파리목, 무판류, 꼭지파리과

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